

# Notice of Allowability

Application No.

10/615,261

Examiner

Christopher Verdier

Applicant(s)

DESY, NORMAND

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicant's Preliminary Amendment dated 7-29-04.
2. ☒ The allowed claim(s) is/are 1-27.
3. ☒ The drawings filed on 07 July 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 7-7-03
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

Art Unit: 3745

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Craig Wilson, Attorney of Record, on October 22, 2004.

The application has been amended as follows:

In the Specification:

In paragraph 3, line 7, "5,914,842" has been changed to -- 5,924,842 --.

In paragraph 17, line 2, after "passageways", -- along line III-III of Figure 2 -- has been inserted.

In paragraph 24, line 8, "per cent" has been changed to -- percent --.

In the Claims:

In claim 1, line 13, "a" has been changed to -- the --.

Art Unit: 3745

The above changes to the specification have been made to correct clerical errors and to change the description of figure 3. The above change to claim 1 has been made to improve the clarity and precision of claim 1.

### ***Reasons for Allowance***

The following is an examiner's statement of reasons for allowance: the instant application is directed towards an unobvious improvement over the invention patented in U.S. Patent 3,360,238. U.S. Patent 3,360,238 discloses a hydraulic turbine substantially as claimed including a rotatably mounted runner 14 with a crown 18 and a band 17, a stationary discharge ring 15, a circumferential chamber 20 formed between the band and the stationary discharge ring, with the chamber having a gas admission aperture 24 for receiving an oxygen containing gas into the chamber, an upper seal 37 positioned adjacent the upstream portion of the band, and a lower seal 29 positioned adjacent the downstream end of the band between the band and stationary discharge ring. The improvement comprises the downstream end portion of the band having a plurality of spaced apart vanes providing outlet passageways between the vanes in fluid communication with the circumferential chamber and the water passageway, with the vanes being configured to rotate with the band and draw the oxygen containing gas and water from the chamber through the outlet passageways and into the water passageway. None of the prior art of record discloses or suggests the improvement.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

Art Unit: 3745

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

*Prior Art*

The prior art made of record but not relied upon is considered pertinent to Applicant's disclosure.

Pedersen is cited to show a hydraulic turbine with seals adjacent the impeller band.

Sproule '640 is cited to show a Francis turbine with a stationary baulk ring 21.

Sproule '719 is cited to show a Francis turbine with seals adjacent the impeller band.


Wuhrer is cited to show a Francis turbine with an air mixing zone.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Verdier whose telephone number is (703)-308-2638. The examiner can normally be reached on Monday-Friday from 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward K. Look can be reached on (703) 308-1044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C.V.  
October 22, 2004

  
Christopher Verdier  
Primary Examiner  
Art Unit 3745